

NSW Parliamentary Inquiry
Portfolio Committee No. 6 – Planning and Environment

Via email to:
PortfolioCommittee6@parliament.nsw.gov.au

Hitachi Zosen Inova Australia Pty Ltd
Level 17, 40 Mount Street
North Sydney
NSW 2060
Australia

Dr Marc Stambach
Managing Director

www.hz-inova.com

13 Sep 2017

Subject: Answer to questions by the NSW Parliamentary Inquiry into EfW Technology

Dear Parliamentary Committee,

Thank you for the hearing on 17 Aug 2017.

Please find attached:

- Answer to question of economic modelling (attached; best printed as A3)
- Answer to reference facilities (compare TNG – Project Definition Brief) :

Facility/Location	Country	Commission year	Capacity t/a	NCV MJ/kg	Furnace/Boiler	Supplier Furnace/Boiler	APC	Supplier APC
TNG	AU	-	2 x 276'250	12.30	Gate	HZI	Semi dry (lime)	-
Grossräschen	DE	2008	1 x 246'000	12.50	Gate	AEE	Semi dry (lime)	LAB
Heringen	DE	2009	2 x 148'500	12.60	Gate	AEE	Semi dry (lime)	LAB
Premnitz	DE	2008	1 x 150'000	13.00	Gate	AEE	Semi dry (lime)	Lühr
Hannover	DE	2005	2 x 140'000	13.50	Gate	AEE	Semi dry (lime)	LAB
Knapsack	DE	2009	2 x 150'000	15.00	Gate	AEE	Semi dry (lime)	Lühr
Ferrybridge	UK	2015	2 x 256'500	13.50	Gate	HZI	Semi dry (lime)	HZI
Riverside	UK	2011	3 x 195'000	9.60	Gate	HZI	Semi dry (lime)	HZI
TIRME Mallorca	ES	2009	4 x 104'000	10.00	Gate	HZI	Semi dry (lime)	HZI

The comparison of the feedstock of the TNG facility is well within the range of the reference plants as shown below:

	Specified Waste						Mixed C&I						MRF	MSW
		paper/card	plastic	textile	vegetation	wood		paper/card	plastic	textile	flock waste			
TNG	12.0%	-	-	x	-	x	76.0%	x	x	x	x	12.0%	x	-
Grossräschen	9.8%	x	x	-	x	x	83.2%	x	x	x	x	7.0%	x	x
Heringen	13.6%	x	x	x	x	x	62.4%	x	x	x	-	24.0%	x	-
Premnitz	14.3%	x	x	x	x	x	57.0%	x	x	x	x	28.7%	x	-
Hannover	9.0%	x	x	x	x	x	75.3%	x	x	x	x	15.7%	x	x
Knapsack	10.0%	x	x	x	x	x	90.0%	x	x	x	-	0.0%	x	-
Ferrybridge	10.0%	n.a.	n.a.	n.a.	n.a.	x	30.0%	n.a.	n.a.	n.a.	n.a.	60.0%	x	x
Riverside	n.a.	x	x	x	x	x	n.a.	x	x	x	-	n.a.	x	-
TIRME Mallorca	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	x	x

- Ferrybridge FM1 (in operation, brochure attached) and FM2 (in construction, FM1 & FM2 Overview attached) processes the following wastes MultiFuel:
 - Solid Recovered Fuel (SRF), municipal solid waste, commercial /industrial waste, waste wood
- Riverside (built, brochure attached) processes the following wastes:
 - Domestic Solid Waste
- Mallorca (brochure attached) processes the following wastes:
 - Municipal solid waste and commercial waste
 - Specific waste fractions Hospital waste (<10%), sewage sludge (<10%), tyres (<2.5%)
- File HZIA corrections (2 minor amendments; attached)
- Press release by VIC Premier Daniel Andrews demonstrating what other States are ready to facilitate with regards to protected cropping and renewable energy

We encourage you to consider:

- Fulfil our societal obligations under the Paris Agreement to move towards a sustainable society
- Ban all untreated waste going to landfill in line with European Community and replace the NSW EfW Police with the European EfW standard (WID/IED)
- Ramp the NSW landfill levy to the same level as in the UK for all of NSW as well as a lower rate for ash material (also applicable for ash from coal and biomass power stations unless recycled); encourage all other States to do same.

- Hypothecate all levies raised back to industry (composting, recycling, Energy from Waste, landfill remediation) to make (nearly) zero waste to landfill happening
- Introduction of Standard Rules SR2012 No13 from England and Wales as a proven standard for millions of tons of bottom ash recycling every year (attached)
- EfW plant visits in Europe

The last point being the most important point, we would be happy to facilitate a program to visit some EfW plants and facilitate discussions with respective local and state regulators, politicians and community groups. We suggest to visit:

- Ferrybridge FM1 (in operation) and FM2 (in construction), near Leeds UK
- Riverside in London UK
- Mallorca Spain

If requested, I would be pleased to provide further evidence or information to the inquiry.

Kind regards

Hitachi Zosen Inova Australia Pty Ltd

Dr. Marc Stammbach

Managing Director

Attachments:

- Seven files (mentioned)